

Salinity

- Salinity, or the amount of dissolved salts, is a big water quality problem for the Colorado River and other waterways in this state.
- Salts are naturally occurring compounds that dissolve into water and change
 its quality. The family of salts includes sodium chloride (common table salt),
 magnesium chloride, calcium chloride, calcium carbonate, calcium sulfate and
 others.
- The higher the concentration of salts in water, the less fit it becomes for human consumption, the more damaging it becomes to plant life, and the less other animals and aquatic life forms can survive on it.
- Roughly 9 million tons of salt is carried down the Colorado River every year past Lee Ferry, the dividing point between the Upper Colorado River Basin and the Lower Basin.
- Salinity is measured in parts per million. Very clean water has 50 parts per million of dissolved salts, 500 parts per million is the maximum desirable concentration for drinking water, the USDA finds damage to plant life can occur at 700-850 parts per million and ocean water has about 35,000 parts per million of dissolved salt.
- Upstream reservoirs like Dillon or Ruedi have salt concentrations around 200 parts per million, Colorado River water near the Utah state line can measure 400-850+ parts per million, Colorado River water delivered to California can range up to 700-800 parts per million and water leaving the fields of last irrigators to use Colorado River water can measure as high as 3,000 parts per million.